WHAT IS CLAIMED IS:

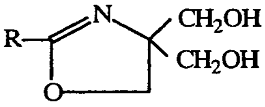
1. An antioxidant having a primary aliphatic hydroxyl group linked to an organic backbone, wherein said antioxidant is derived from reactants that produce an unconverted -CH_2OH moiety, said reactants selected from the group consisting of:

(a) a branched or linear alcohol having the general formula $R(OH)_n$, wherein R is an aliphatic or cyclo-aliphatic group having from about 2 to 20 carbon atoms and n is at least 2; and at least one branched or linear carboxylic acid which has a carbon number in the range between about C_2 to C_{20}; wherein said antioxidant has a hydroxyl number greater than about 30 and less than about 180;

(b) at least one linear or branched acid and at least one metal selected from the group consisting of titanium, silicon, aluminum, nickel, iron, and copper;

where, upon oxidation the unconverted -CH_2OH moiety is capable of boosting the efficacy of free radical scavengers and hydroperxide decomposer antioxidants.

2. A lubricant having a major amount of lubricating oil and a minor amount of an antioxidant comprising the reaction product of tris (hydroxymethyl) aminomethane and a linear or branched carboxylic acid, thereby producing substituted oxazolines having the general formula:



wherein R is a linear or branched alkyl chain derived from said linear or branched carboxylic acid

3. The anti-oxidant of claim 2 wherein said antioxidant has a hydroxyl number of greater than about 30 and less than about 180.

4. The antioxidant of claims 1 or 3 wherein said antioxidant has a hydroxyl number of greater than about 50 and less than about 120.

5. The antioxidant of claims 1 or 3 wherein said antioxidant has a hydroxyl number of greater than about 70 and less than about 100.

6. The antioxidant of claims one or two wherein said acid comprises about 50% or more of a branched carboxylic acid.

7. Th antioxidant of claim 6 wherein said branched carboxylic acid is further characterized as having a carbon number ranging from C_2 to C_4 and whose branches have methyl or ethyl groups.

8. The antioxidant of claim 7 wherein said methyl branches are dimethyl branches that are located at any carbon position from C_2 to C_{n-1}.

9. The antioxidants of claim 6 wherein said branched carboxylic acid is further characterized as having a carbon number from about 5 to about 20, which acid has at least one methyl group located at the penultimate carbon position C_{n-1}.

10. The antioxidant of claim 9 wherein branches of the branched carboxylic acid are characterized as dimethyl branches, said branches being located at any position between, and including, C_2 and C_{n-1}.

11. The antioxidant of claim 9 wherein the branched carboxylic acid has a methylene moiety at the penultimate carbon position.